

CLAIMS

1. An adapter for use in mounting an ancillary unit in an
5 engine block which has at one end a lateral flange (10)
formed with an aperture for mounting of the ancillary unit,
the adapter comprising a casing (112) for mounting on the
end face of the engine to overlie the aperture, which casing
(112) is provided with an O-ring (130) for effecting a seal
10 between the casing (112) and the aperture in the lateral
flange (10) of the engine, and
characterised in that the casing (112) has a larger diameter
portion separated by a shoulder from a portion of reduced
diameter, a retaining sleeve (132) being axially slidable
15 over the reduced diameter portion of the casing thereby
holding the O-ring (130) captive between the axial end of
the retaining sleeve (132) and the shoulder.
- 20 2. An adapter according to claim 1, characterized in that
the adapter further comprises a shaft (116) journaled in
the casing (112), a formation (122) at one end of the shaft
(116) to enable the shaft (116) to be coupled to the input
shaft of the ancillary unit and a cog (120) solid with the
25 opposite end of the shaft (116) for meshing with an engine
driven gear.
3. An adapter according to claim 2, characterized in that
30 the part of the drive shaft (116) engaged by the cog (120)
has the same diameter as the part journaled in the casing
(112).
- 35 4. An adapter according to claim 3, characterized in that
the drive shaft (116) is formed as a hollow shaft.

5. An adapter according to claim 4, characterized in that an internally splined coupling is formed by broaching one end of the shaft (116).

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6. An adapter according to claim 5, characterized in that an oil passage is provided to open into the hollow shaft (116) to provide oil for lubricating one of the thrust bearing surfaces (120a) of the cog (120).

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7. A drive adapter according to claim 6, characterized in that the retaining sleeve (132) is held in position by the ancillary unit.

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8. A drive adapter according to claim 7, characterized in that, prior to the mounting of the ancillary unit, a temporary cover plate (134) is operable to hold the retaining sleeve (132) in position.

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9. A drive adapter according to claim 8, characterized in that the temporary cover plate (134) is held by means of bolts (136) that engage in the mounting holes for the ancillary unit.

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10. A method of replacing an O-ring seal of an adapter as claimed in any preceding claim, which comprises the steps of :

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- removing the ancillary unit from the adapter,
- sliding the retaining sleeve (132) off the reduced diameter portion of the casing (112) ,

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- extracting the O-ring seal (130) from the gap between the casing (112) and the surrounding aperture in the engine lateral flange (10),

- fitting a new O-ring (130) over the reduced diameter portion of the casing (112),
- sliding the retaining sleeve (132) on to the reduced diameter portion of the casing (112) to push the new O-ring
- 5 (130) towards the shoulder defined by the casing (112), and
- mounting the ancillary unit on the adapter so as to compress the new O-ring (130) between the retaining sleeve (132) and the shoulder.